AN 118:244525 HCA Full-text
TI Liquid developer for electrostatography
IN Kato, Eiichi; Hattori, Hideyuki
PA Fuji Shashin Film K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 39 pp.
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LA Japanese
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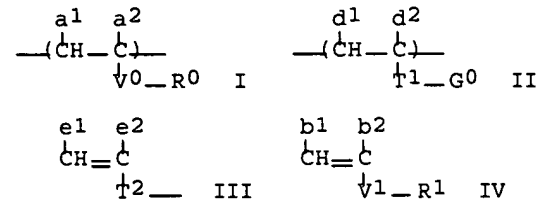
GI



AB In an electrophotog. liquid developer containing dispersed resin particles in an nonaq. solvent having an elec. resistivity ≥ 109 Ω cm and dielec. constant ≥ 3.5, the resin particle comprises an A-B block copolymer from an A block containing a polymer component and/or monofunctional monomer A having ≥1 of a phosphono group, carboxyl group, sulfo group, OH, formyl group, carboxyamide group, sulfonamide group, amino group, P(O)R11OH (R11 = R12, OR12; R12 = hydrocarbon group, and cyclic acid anhydride group, and a B block. The B block contains a polymer component represented by (I): V0 = COO, OCO, (CH2)l1OCO, (CH2)l2COO (l1, l2 = 1-3) O, SO2, CO, CONR13, SO2NR13, CONHCOO, CONHCONH, phenylene; R13 = H, hydrocarbon; R0 = hydrocarbon; a1, a2 = H, halo, CN, C1-8 hydrocarbon, COOZ1 with an optional C1-8 hydrocarbon interposing group; and Z1 = H, C1-22 hydrocarbon. The particles are prepared by polymerization of solns. containing a monofunctional monomer A, which is soluble in the above solvent but becomes insol. upon polymerization, and a monofunctional monomer MA, which has a number average mol. weight ≤ 1 + 104, in the presence of a soluble dispersion stabilizing resin. The macromonomer MA comprises a repeating unit represented by (II): T1 = COO, OCO, (CH2)lCOO, (CH2)lOCO, O, SO2, CONHCOO, CONHCONH, COND1, SO2ND2, phenylene; D1 = H, C1-22 hydrocarbon; l = 1-3; G0 = C1-22 hydrocarbon with optional O, CO, CO2, OCO, SO2, ND2, COND2, and N(D2)CO; D2 = similar to D1, d1, d2 = H, halo, CN, hydrocarbon, COOD3 with an optional hydrocarbon interposing group; D3 = H, (un)substituted hydrocarbon, and a terminal group represented by (III): T2, e1, e2 = similar to T1, d1, and d2, on only 1 end of the

repeating unit. The dispersion stabilizing resin comprises a graft copolymer containing a monofunctional macromer MM, which has a weight average mol. weight 1 + 103-2 + 104 and comprises the B block having a terminal polymerizing double bond, and a monomer B represented by (IV): V1 = COO, OCO, (CH2)13OCO, (CH2)14COO, O; l3, l4 = 1-3; R1 = C≥8 aliphatic group; b1, b2 = H, halo, C1-6 hydrocarbon group. The developer has improved properties of redispersion, storage, stability, image reproduction, and fixing, and is useful in making printing plates.

IC ICM G03G009-13
ICS C08F299-00

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST electrophotog liq developer printing plate

IT Printing plates
(electrophotog. liquid developers for)

IT Electrophotographic developers
(liquid, dispersion compns.)

IT 118730-13-5P 125192-67-8P 134266-83-4P 137560-47-5P 138113-87-8P
138113-95-8P 138113-96-9P 138113-97-0P 138114-01-9P 138114-02-0P
138114-08-6P 138114-10-0P 138114-12-2P 138114-14-4P 138114-24-6P
138114-25-7P 138114-26-8P 138114-27-9P 138114-29-1P 138114-33-7P
138114-36-0P 138114-38-2P 138114-40-6P 138114-44-0P 143646-30-4P
147046-11-5P 147046-12-6P 147046-13-7P 147046-14-8P
RL: PREP (Preparation)
(latex, preparation of, for electrophotog. developer)

IT 139598-53-1P
RL: PREP (Preparation)
(preparation of, as dispersion stabilizer)

IT 139598-54-2P 139598-55-3P 139598-56-4P 139598-57-5P 139598-58-6P
139598-59-7P 139598-60-0P 139598-61-1P 139598-62-2P 139598-63-3P
139598-64-4P 139598-65-5P 139598-66-6P 139598-67-7P 139598-68-8P
139598-69-9P 139598-70-2P 139598-71-3P 139598-72-4P 139598-74-6P
139598-75-7P 139598-76-8P 139598-77-9P 139598-79-1P 139598-80-4P
139598-81-5P 139598-82-6P 139598-83-7P 139598-85-9P 139687-39-1P
147045-28-1P 147067-02-5P **147127-63-7P**
RL: PREP (Preparation)
(preparation of, as dispersion stabilizer for electrophotog.

developers)
IT 25639-21-8DP, carboxy-terminated, 2-hydroxy-3-methacryloyloxypropyl ester
112955-45-0P 112955-56-3P 114512-15-1P 137646-74-3DP, acrylamide
139104-82-8P 139104-86-2P 139104-87-3P 139104-90-8P 139104-94-2P
139104-96-4P 139105-01-4P 139105-03-6P 139105-07-0P 139105-08-1P
139105-10-5P 139105-12-7P 141348-77-8P 141349-31-7P 141414-91-7P
141415-10-3P 141415-33-0P 141415-66-9P 141440-78-0P 141759-32-2P
141759-91-3P 143709-75-5P 147130-23-2P 147130-24-3P 147130-26-5P
147130-28-7P 147130-29-8P 147130-30-1P 147130-31-2P 147130-32-3P
147130-33-4P 147130-34-5P 147130-35-6P 147130-36-7P 147130-37-8P
147130-38-9P 147130-39-0P 147130-40-3P 147130-41-4P 147130-42-5P
147130-44-7P 147130-45-8P 147130-46-9P 147130-47-0P 147130-50-5P
RL: PREP (Preparation)
(preparation of, for electrophotog. developers)
IT 138115-34-1DP, carboxylated, ester with 2-hydroxyethyl methacrylate
138232-67-4DP, reaction product with 4-bromomethylstyrene, reduction product
of 139357-83-8DP, hydrolyzed, reaction products with ethylene oxide,
ester with methacrylic acid 139598-51-9DP, reaction product with 4-bromomethylstyrene , hydrolyzed
RL: PREP (Preparation)
(preparation of, in formation of dispersion stabilizer for electrophotog.
toner)